

# GSM EVB board unstable issue

Version: V.01

## Revision History

Rev.	Date	Author	Revision Description
V.01	2/28/2011	Wenbin Fu Lingjing Fan Kunyu Cao	Initial Draft

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# 1 Issue description

GSM EVB board can't Dial-up, auto off net and can't wake up at sleep mode.

# 2 Issue reason

- (1) When design EVB board, AT1 (J6) only connected TX, RX and Ground. Although it can dial-up to network, but it is unstable. According our checking and trying, we think the problem is CTS and DCD floating to these issues.
- (2) When design EVB board, PC\_DTR2 used to make up module, because when PC running dial-up process, there is changing from -10V level to 10V level, then there is a interrupt from 3V to 0V at transistor collector (BB\_DTR2).

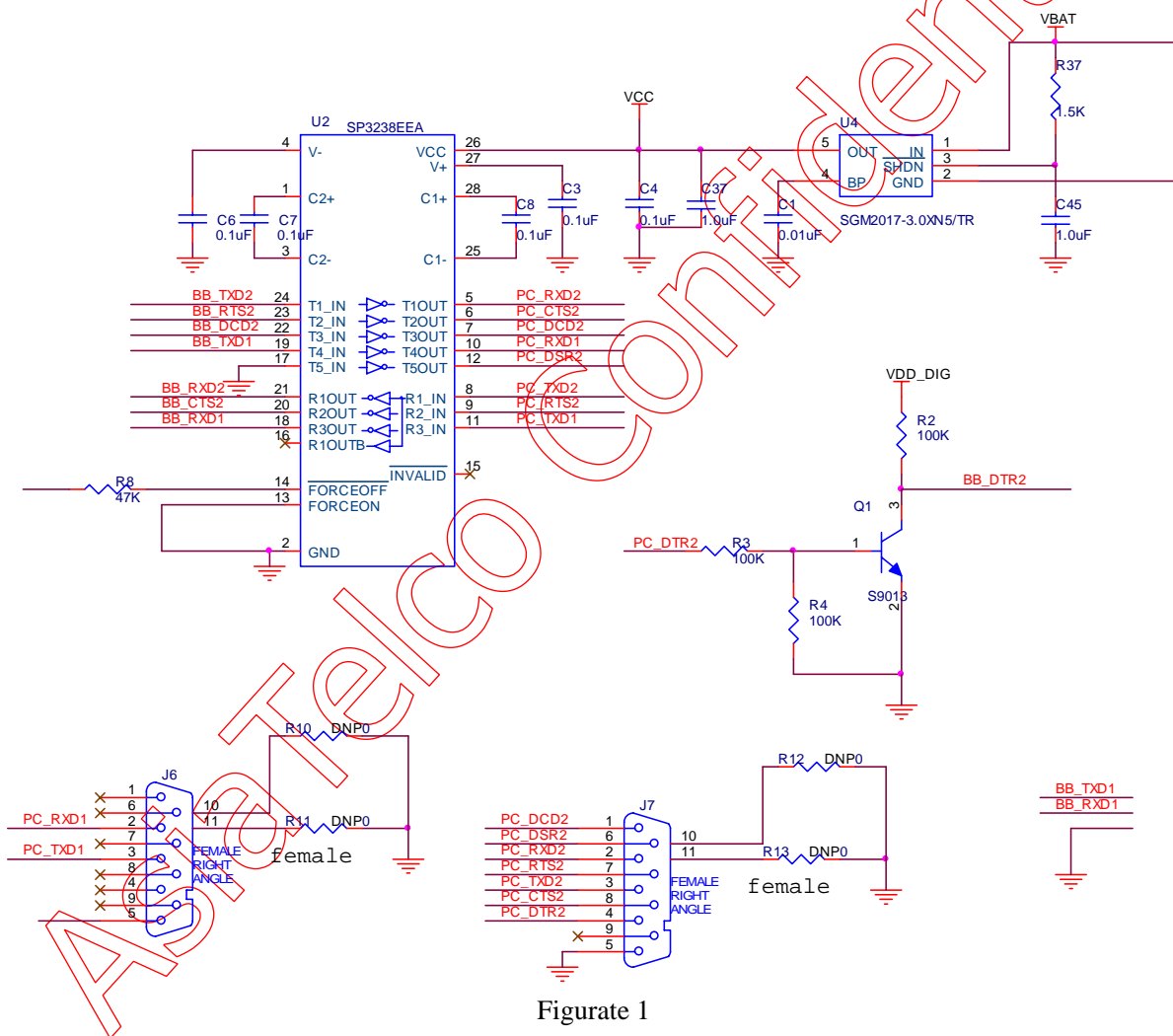


Figure 1

# 3 Solution way.

(1) according test, connect DCD from AT1 to AT2, connect CTS from AT1 to AT2. And 5509 module need power-down RTS (15pin BB\_RTS2) and DCD (58pin BB\_DCD2), power-down DCD can solve the problem of off net.

A. connect DCD from AT1 to AT2 . see the Figure 2

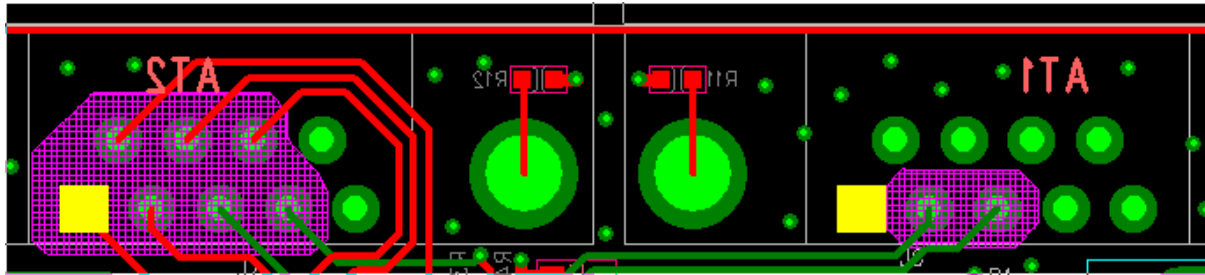


Figure 2

B. Connect CTS from AT1 to AT2, see the Figure 3.

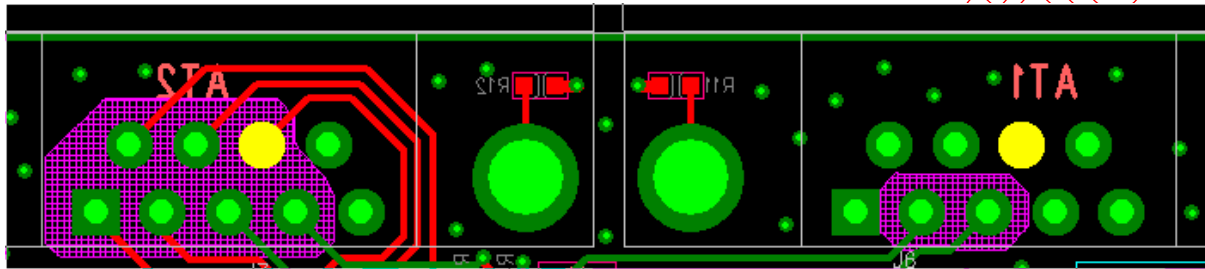


Figure 3

C. Power-down DCD2 signal. See the Figure 4.

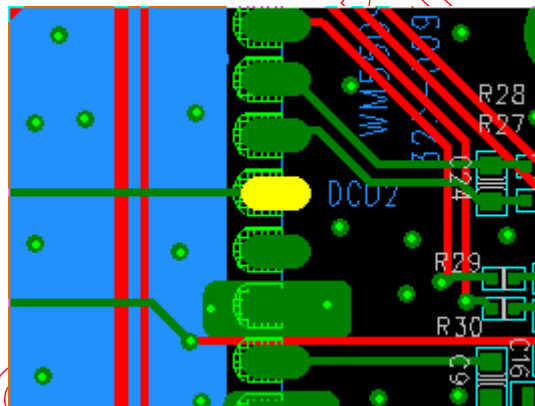


Figure 4

D. Power-down the RTS2 signal, see the Figure 5.

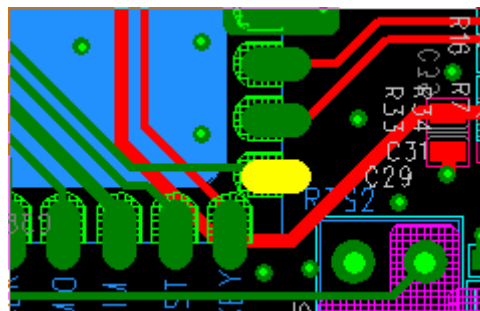
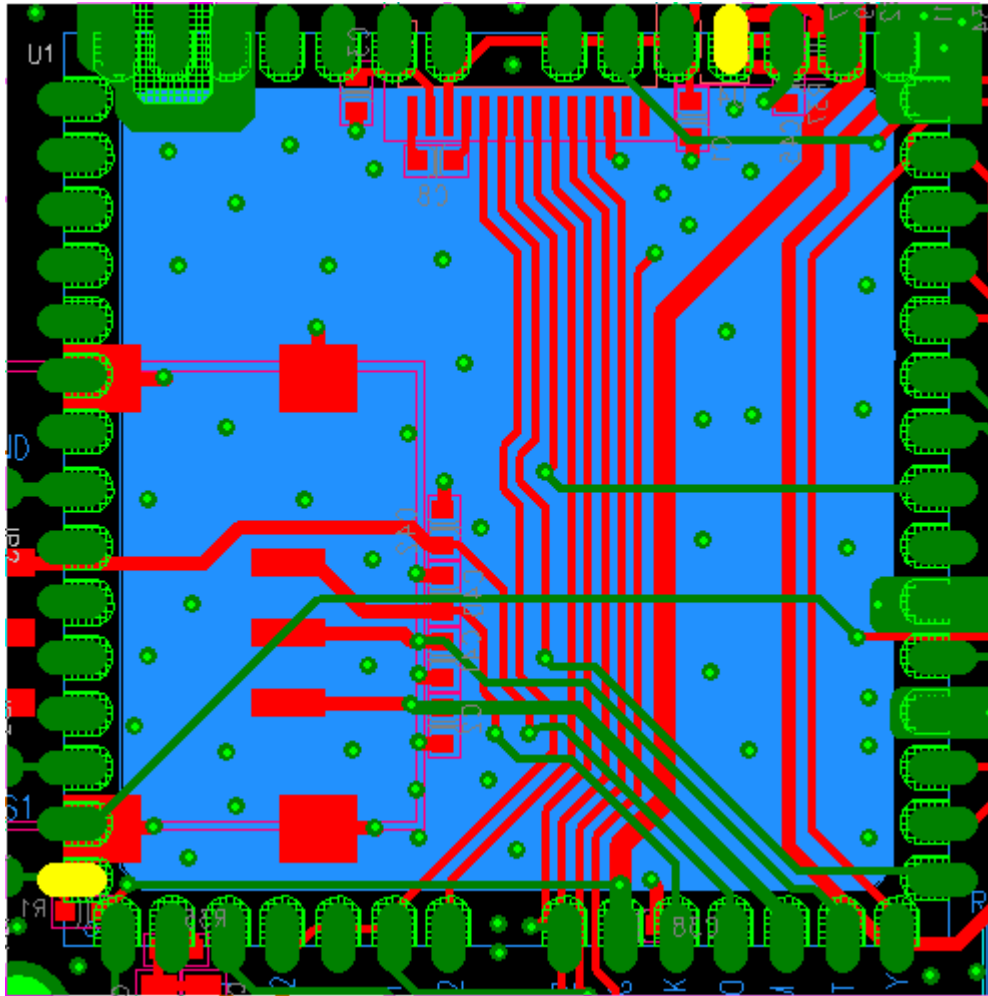


Figure 5

(2) Connect BB\_DTR2 to HOOK\_EINT\_GPIO42, use this interrupt make up module if there is no process on software at EINT0\_DTR2. but first, ensure BB\_DTR2 disconnect with EINT0\_DTR2.



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